

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Request of PTC-220, LLC for Waivers of	)	WT Docket No. 08-256
Certain 220 MHz Rules	)	

To: Chief, Wireless Telecommunications Bureau

**REPLY COMMENTS OF PTC-220**

PTC-220, LLC (“PTC-220”), by its undersigned counsel, hereby submits these Reply Comments in response to the Public Notice<sup>1</sup> issued by the Federal Communications Commission (“Commission”) seeking comment on the Request for Waivers filed by PTC-220 on October 31, 2008 (“Waiver Request”).<sup>2</sup> As detailed below, a broad range of railroad industry commenters – and the Federal Railroad Administration (“FRA”) – unanimously agree that granting the Waiver Request and facilitating the development and deployment of a nationwide, interoperable “positive train control” network is in the public interest. Based on this undivided support, the lack of any opposing comments or objections from other 220 MHz licensees, and on PTC-220’s continuing efforts to advance positive train control technology, the Commission should grant the Waiver Request expeditiously.

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<sup>1</sup> *Wireless Telecommunications Bureau Seeks Comment on Request by PTC-220, LLC for Waiver and Extension of Time to Construct and a Request for Other Rule Waivers Regarding Part 90 220 MHz Licenses*, Public Notice, DA 08-2807, WT Docket No. 08-256 (WTB rel. Dec. 24, 2008).

<sup>2</sup> *See* Request for Waivers, FCC File Nos. 0003634433-38; 0003634442-48; 0003634450; 0003634452-54; 0003634456; 0003634458; 0003634459; 0003634461; 0003634463; 0003634465 and 0003634466 (filed Oct. 31, 2008).

## **I. Commenters Unanimously Agree that the Waiver Request is in the Public Interest.**

Commenters from the railroad industry all support the Waiver Request and agree that tremendous public safety benefits will accrue from the deployment of positive train control systems.<sup>3</sup> BNSF Railway (“BNSF”), for example, states that a grant of the Waiver Request “is vital to the safe and efficient operations of the nation’s railroad industry” and notes that positive train control “represents the future of railway safety and efficiency.”<sup>4</sup> Amtrak, the nation’s principal intercity passenger railroad, “fully endorses” the Waiver Request and submits that installing positive train control “will enhance the safety” of its passenger trains.<sup>5</sup> In addition, the FRA “strongly supports” the Waiver Request and comments that “any actions that facilitate the installation and operations of these critical systems are in the best interest of the public.”<sup>6</sup> The Association of American Railroads (“AAR”) and the American Public Transportation Association (“APTA”) agree with the FRA’s comments.<sup>7</sup> The fact that the principal federal agency responsible for railway safety as well as industry associations and members with divergent interests all cite to the public interest benefits of the Waiver Request, combined with

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<sup>3</sup> See Comments in Support of Request for Waivers filed by the Association of American Railroads, WT Docket No. 08-256 (filed Jan. 23, 2009) (“AAR Comments”); Comments in Support of Request for Waivers filed by the American Public Transportation Association, WT Docket No. 08-256 (filed Jan. 23, 2009) (“APTA Comments”); Comments of BNSF Railway, WT Docket No. 08-256 (filed Jan. 23, 2009) (“BNSF Comments”); Amtrak Comments, WT Docket No. 08-256 (filed Jan. 21, 2009) (“Amtrak Comments”).

<sup>4</sup> BNSF Comments at 1.

<sup>5</sup> Amtrak Comments.

<sup>6</sup> Letter from Clifford Eby, Acting Administrator, FRA, to Marlene H. Dortch, Secretary, FCC and Joel Taubenblatt, Deputy Bureau Chief, FCC Wireless Telecommunications Bureau, at 1, 3 (filed Dec. 15, 2008) (“FRA Letter”).

<sup>7</sup> See AAR Comments at 3-4; APTA Comments at 3. AAR is a non-profit organization whose members generate more than 90% of the total operating revenues of all freight railroads in the United States; Amtrak is also a member of AAR. AAR Comments at 1. APTA is a non-profit international trade association whose member transit systems serve more than 90% of Americans who use public transportation. APTA Comments at 1. APTA includes “more than 1,500 public and private member organizations, including transit systems; planning, design, construction and finance firms; product and service providers; academic institutions; and state associations and departments of transportation.” *Id.*

the fact that no commenter or 220 MHz licensee objected to any portion of the Waiver Request, reflect the overwhelming support and need for PTC-220's proposed positive train control system.

All commenters especially agree with PTC-220 that a grant of the Waiver Request is crucial for the railroad industry to comply with the requirements of the Rail Safety Improvement Act of 2008.<sup>8</sup> As discussed in the Waiver Request, the Rail Safety Improvement Act of 2008 mandates the development and implementation of positive train control by Class I railroads by December 31, 2015.<sup>9</sup> Amtrak states that the waivers "are necessary for implementation of a nationwide [positive train control] system mandated by Section 104" of that Act.<sup>10</sup> AAR and APTA also highlight the benefits of nationwide interoperability on PTC-220's proposed system, stating that "[a] common radio platform is a key ingredient to successful and timely implementation in accordance with the statutory deadlines, and the spectrum recently acquired by [PTC-220] is critical to the entire undertaking."<sup>11</sup> BNSF, noting the FRA's support for the Waiver Request and the need to comply with the Act, declares that "[i]t is difficult to imagine a licensee providing the Commission with clearer evidence that its spectrum will be deployed in the public interest."<sup>12</sup>

Commenters also agree with PTC-220 that granting the Waiver Request is consistent with the Commission's spectrum efficiency and flexibility goals. For example, AAR and APTA agree that the waivers will enable "more effective spectrum utilization."<sup>13</sup> BNSF, moreover,

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<sup>8</sup> See Rail Safety Improvement Act of 2008, Pub. L. No. 110-432, 122 Stat. 4848 (2008); *see also* AAR Comments at 2-3; APTA Comments at 2; Amtrak Comments.

<sup>9</sup> See Waiver Request at 4-5; *see also* FRA Letter at 1-2.

<sup>10</sup> Amtrak Comments.

<sup>11</sup> AAR Comments at 3; APTA Comments at 3. Amtrak also asserts that "[h]aving an interoperable system nationwide will enable [Amtrak] to equip [its] trains with one system giving [Amtrak] the ability to operate seamlessly over all the freight railroads." Amtrak Comments.

<sup>12</sup> BNSF Comments at 3.

<sup>13</sup> AAR Comments at 2; APTA Comments at 2.

argues that the Commission's rules regarding station identification, commercial use, and base/mobile frequency allocations "restrain licensee flexibility and provide little, if any, public interest benefit in the context of a geographically licensed, nationwide system such as PTC-220's."<sup>14</sup> The FRA elaborates further, stating that "railroads need the capability to maximize their use of assigned spectrum" and "operate their communications at any of the assigned frequencies in their authorized frequency range," and that "station identification does not provide any meaningful information to any person listening to the broadcast, but could actually be detrimental to the PTC system operation by interrupting critical communications flow."<sup>15</sup>

Finally, Commenters support PTC-220's request for an extension of the construction deadlines, agreeing that more time is necessary to develop and deploy innovative positive train control technology nationwide. As detailed in the Waiver Request, absent a waiver grant, PTC-220 would have no alternative but to expend significant capital investment and drain valuable, limited personnel resources to deploy suboptimal, stopgap systems and services on a nationwide scale to meet the existing construction deadlines and preserve its licenses. Such expenditures would be particularly wasteful and contrary to the public interest because any stopgap system would be incompatible with the positive train control network that PTC-220 is developing, and requiring PTC-220 to meet the current construction deadlines could delay further the significant public safety benefits of the system.<sup>16</sup> The FRA states that the "level of effort" required to "deploy the communications infrastructure, modify the necessary wayside devices (such as signal, switches, and highway-rail grade crossings), modify the dispatching offices, and install the required onboard equipment is . . . unobtainable" during the extremely brief remaining

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<sup>14</sup> BNSF Comments at 4-5.

<sup>15</sup> FRA Letter at 2.

<sup>16</sup> Waiver Request at 9, 12-13.

construction period; the FRA also notes that the rail industry’s “current shortage of trained and qualified personnel” further restrict PTC-220’s ability to meet the existing construction deadlines.<sup>17</sup>

Moreover, PTC’s recent acquisition of its licenses, combined with the current lack of viable equipment for positive train control – and the need for testing, finalization, and separate FRA approval of such equipment under the Rail Safety Act Improvement of 2008 – continue to justify an extension of the construction deadlines applicable to PTC-220’s 220 MHz licenses. The Wireless Telecommunications Bureau (“Bureau”) recently granted additional time for certain multilateration Location and Monitoring Service (“M-LMS”) licensees to meet construction deadlines, stating that a “substantial factor warranting relief” was that equipment was not commercially available for current deployment use in the band.<sup>18</sup> Similarly, despite PTC-220’s ongoing efforts, positive train control equipment remains unavailable for deployment on a nationwide scale (although there has been continued progress, as detailed below).<sup>19</sup>

## **II. Since Filing the Waiver Request, PTC-220 has Continued to Advance the Development of Positive Train Control, including Plans for Nationwide Deployment.**

PTC-220 remains diligent in its pursuit of viable positive train control technology. Since filing the Waiver Request, representatives from PTC-220 as well as Union Pacific Corporation (“UP”) and Norfolk Southern Corporation (“NS”) (the corporate parents of PTC-220’s two existing members), have participated in numerous meetings with the FRA and other railroad industry representatives regarding the development of interoperable positive train control

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<sup>17</sup> FRA Letter at 2; *see also* BNSF Comments at 2.

<sup>18</sup> *Requests of Progeny LMS, LLC and PCS Partners, L.P. for Waiver of Multilateration Location and Monitoring Service Construction Rules*, Order, 23 FCC Rcd 17250 ¶ 22 (2008).

<sup>19</sup> BNSF also notes that the 220 MHz band had a “late start” with respect to equipment development, presenting a “unique case where extension requests should be viewed more favorably than might otherwise be the case.” BNSF Comments at 4.

systems. For example, PTC-220 representatives have been actively involved in the monthly sessions of the Interoperable Train Control Committee and the PTC Working Group (a subcommittee of the FRA’s Rail Safety Advisory Committee (“RSAC”)). Through these groups, key PTC-220 personnel have been assisting the FRA in developing regulations to implement the statutory requirements of Section 104 of the Rail Safety Improvement Act.

PTC-220 representatives have also engaged in multiple discussions with equipment manufacturers and railroad industry organizations such as AAR and APTA regarding standardization and interoperability issues. As AAR and APTA discuss in their comments, interoperability “is a key component to successful implementation of the next generation of [positive train control].”<sup>20</sup>

Although positive train control technology is still developing and must be finalized and approved by the FRA before nationwide deployment, PTC-220’s member UP has already begun a build-out “head start” in Southern California. In that region, UP is working to construct a positive train control network covering the territory served by Metrolink, a regional commuter rail system linking the Los Angeles basin.<sup>21</sup> The territory includes Los Angeles, Riverside, Orange, and San Bernardino counties. Starting with the Metrolink area, PTC-220 and its members intend to continue building out, region by region, based on risk-prioritized variables (e.g., traffic and passenger density, complexity of rail operations, and hazardous materials transportation), until the positive train control network is complete.

A key component of the proposed network is that it will provide nationwide interoperability, which will necessitate a full build-out of the spectrum throughout the country.

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<sup>20</sup> AAR Comments at 3; APTA Comments at 3.

<sup>21</sup> See “Freight railroads pledge to install advanced safety measures by 2012,” Los Angeles Times (Oct. 9, 2008), available at <http://www.latimes.com/news/printedition/california/la-me-metrolink9-2008oct09,0,5279929.story>.

As a result, the network will be designed to use all of the frequencies licensed to PTC-220, including the spectrum covered by PTC-220's nationwide, regional, and economic area ("EA") licenses. UP and NS together already provide service across track covering a significant portion of the geographic area of the United States. In addition, PTC-220 contemplates that BNSF and CSX Corporation ("CSX") will become members (co-owners) of PTC-220. Extensive discussions have taken place at the highest levels of all the companies, and PTC-220 is in the last round of negotiations with BNSF and CSX to become members. Adding BNSF and CSX would put the substantial majority of freight railroad lines in the United States onto the PTC-220 network, which would significantly expedite the deployment of the nationwide network. Maps of the rail lines operated by UP, NS, BNSF and CSX are attached as Exhibit A. Deploying the PTC-220 network along the lines of these four railroads alone would mean that about 90% of the nation's rail freight transport would be covered by positive train control technology.<sup>22</sup> Moreover, PTC-220 has been actively developing the terms of standardized lease agreements or other service agreements that will provide other railroads and commuter lines with access to the network, so that the network will become a truly nationwide, interoperable network. PTC-220 expects these procedural mechanisms to be fully developed and available to other railroads by the second quarter of 2009.

PTC-220 explained in the Waiver Request that it must obtain FRA approval for its underlying positive train control network before it can generate a nationwide build-out plan and timeline.<sup>23</sup> As mentioned above, the FRA is still developing the applicable regulations that will establish detailed network deployment specifications. As noted above, representatives of PTC-

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<sup>22</sup> This calculation, obtained from staff at the AAR, is based on Gross Ton Miles ("GTM"), where 1 GTM = 1 ton of freight hauled 1 mile.

<sup>23</sup> Waiver Request at 10, 12, 15-17.

220 have been meeting regularly with the FRA to expedite this process, and PTC-220 currently expects that formal proposed regulations will be issued in the fourth quarter of this year.

Although PTC-220 cannot provide a detailed build-out plan at this time, it can submit regular (*e.g.*, semi-annual) status updates to the Commission. Furthermore, once PTC-220's members obtain FRA approval (currently anticipated to occur in 2010), it can provide the Commission with a detailed, nationwide build-out plan for the network. Based on the large service area of its current and future members, and the propagation characteristics of the 220 MHz spectrum, PTC-220 expects to meet the Commission's build-out requirements for all of its licenses if granted this five-year extension (absent any unforeseen developments), as will be reflected in any build-out plan submitted to the Commission.

Despite PTC-220's efforts, more time remains needed to deploy a nationwide, interoperable positive train control system. Furthermore, relief from the other rules described in the Waiver Request remains necessary to ensure that the interoperable system does not lose critical functionality and safety benefits.

### **III. The FCC Should Grant the Waivers Expeditiously to Facilitate Positive Train Control.**

Given the unanimous commenter support, the lack of any opposing comments or objections from other 220 MHz licensees, and PTC-220's continuing efforts to advance positive train control technology, the Commission should grant the Waiver Request expeditiously. The next construction deadline for nine of PTC-220's licenses (including a nationwide license) occurs on March 22, 2009, and PTC-220 respectfully requests Commission action before that date so that it can avoid building a stopgap, "license-saver" system. Although PTC-220 has not

yet filed renewal applications for any of the licenses, it also respectfully requests that the Commission clarify any related effect of a grant of the Waiver Request on the renewal process.<sup>24</sup>

Respectfully submitted,

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<sup>24</sup> For example, PTC-220 requested in the Waiver Request that the Commission waive the substantial service requirement in Section 90.743. *See* Waiver Request at 7.

## **EXHIBIT A**

### **RAILROAD SYSTEM MAPS**

- Union Pacific
- Norfolk Southern
- BNSF
- CSX





## Division Maps



- California
- Chicago
- Gulf
- Kansas
- Los Angeles
- Montana
- Nebraska
- Northwest
- Powder River
- Southwest
- Springfield
- Texas
- Twin Cities

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# CSX SYSTEM MAP

